

# Secure Coding Master Course For Banking and Finance

Learn via: **Classroom**

Duration: **5 Day**

## Overview

*"Money makes the world go round...."* – remember? And yes: it is your responsibility to secure all that. As a fintech company you have to take up the challenge, and beat the bad guys with bomb-proof, secure applications!

If there is a domain where security is critical, it is definitely fintech. Vulnerability is not an option if you want to stay a trusted and reliable vendor with systems and applications that certainly comply with PCI-DSS requirements. You need devoted secure coders with high-level professional attitude and developers eager to fight all coding problems: yes, you need a skilled team of software engineers.

Want to know why? Just for the record: even though IT security best practices are widely available, 90% of security incidents stem from common vulnerabilities as a result of ignorance and malpractice. So, you better keep loaded in all possible ways with up to date knowledge about secure coding – unless you *wanna cry!*

We offer a training program exclusively targeting engineers developing applications for the banking and finance sector. Our dedicated trainers share their experience and expertise through hands-on labs, and give real-life case studies from the banking industry – engaging participants in live hacking fun to reveal all consequences of insecure coding.

## Prerequisites

There are no prerequisites for this course.

## Who Should Attend

Developers working in the banking and finance sector.

## What You Will Learn

- Understand basic concepts of security, IT security and secure coding
- Understand security considerations in the SDLC
- Understand special threats in the banking and finance sector
- Understand regulations and standards
- Learn Web vulnerabilities beyond OWASP Top Ten and know how to avoid them
- Learn about XML security
- Learn client-side vulnerabilities and secure coding practices
- Have a practical understanding of cryptography
- Understand the requirements of secure communication
- Understand essential security protocols
- Understand some recent attacks against cryptosystems
- Understand security concepts of Web services
- Learn about JSON security
- Learn about typical coding mistakes and how to avoid them
- Get information about some recent vulnerabilities in the Java framework
- Learn about denial of service attacks and protections
- Get practical knowledge in using security testing techniques and tools
- Learn how to set up and operate the deployment environment securely
- Get sources and further readings on secure coding practices

## Outline

- IT security and secure coding

- Special threats in the banking and finance sector
- Regulations and standards
- Web application security (OWASP Top Ten 2017)
- Client-side security
- Security architecture
- Requirements of secure communication
- Practical cryptography
- Crypto libraries and APIs
- Security protocols
- Input validation
- Security of Web services
- Improper use of security features
- Object-relational mapping (ORM) security
- Improper error and exception handling
- Time and state problems
- Code quality problems
- Denial of service
- Security testing techniques and tools
- Deployment environment
- Principles of security and secure coding
- Knowledge sources